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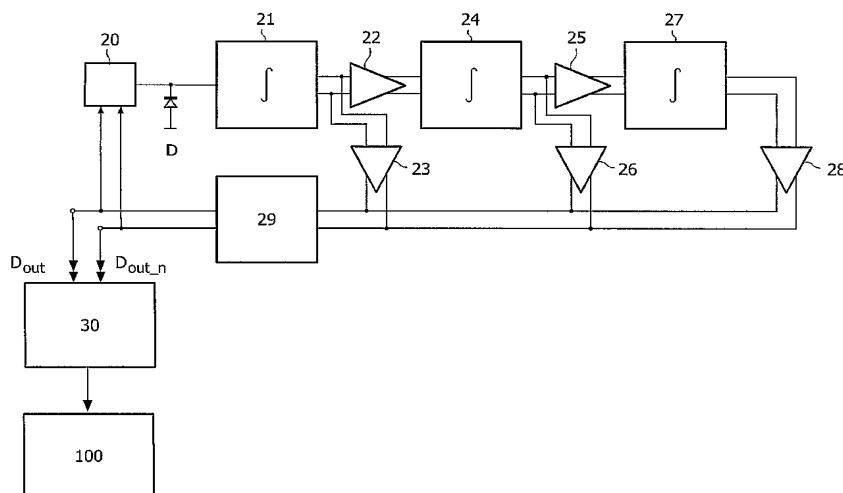
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(54) Title: SEMICONDUCTOR-BASED IMAGE SENSOR



(57) Abstract: A detector arrangement and/or a semiconductor-based image sensor with a plurality of detector elements or image pixels is described, which each have an integrated SD- (Sigma Delta) Modulator (20 to 29) or an integrated SD-A/D-(Sigma Delta Analog/Digital) converter (20 to 30), as well as particularly such a detector arrangement and/or such an image sensor on the basis of a CMOS-semiconductor. Particularly on the basis of the differential version and/or the multi-phase structure of the SD modulator and the SD-A/D converter, a detector arrangement and/or an image sensor with specially high noise robustness, a high dynamic range and a lesser noise can be produced, so that this is particularly suitable for usage in Computer Tomography (CT) apparatus.

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